

Cyanobacteria Broth



Medium used for the cultivation and enumeration of Cyanobacteria.

• CONTENTS (Liter)

Dipotassium Phosphate	1.5 g
Magnesium Sulfate	0.04 g
Calcium Chloride	0.036 g
Citric Acid	0.006 g
Ferric Ammonium Citrate	0.006 g
Sodium Carbonate	0.02 g
Final pH = 8.5 ± 0.2 at 25°C	

• PROCEDURE

Suspend 1.61 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Aseptically add 2 vials of Cyanobacteria Trace Metal supplement (MB-C0756). Mix well. Pour into tubes.

Cyanobacteria Trace Metal supplement

1 vial contents (each vial is sufficient for 500mL of medium)

Boric Acid	1.43 mg
Manganese Chloride	0.905 mg
Zinc Sulfate	0.111 mg
Sodium Molybdate	0.0195 mg
Copper Sulfate	0.0395 mg
Cobalt Nitrate	0.0247 mg

• INTERPRETATION

Cyanobacteria Broth is a medium used for the cultivation and enumeration of Cyanobacteria. Dipotassium phosphate is the buffering agent. Magnesium sulfate, calcium chloride and ferric ammonium citrate are the sources of ions to stimulate growth. Citric acid acts as metabolic intermediate. Sodium carbonate is a primary carbon source in macronutrient. Boric acid, manganese chloride, zinc sulfate, sodium molybdate, copper sulfate and cobalt nitrate provide the essential electrolytes and minerals.

• TECHNIC

Inoculate the specimen using a sterile needle to the medium. Incubate at 25 ± 2°C for 1 - 2 weeks under shaking incubator & light (2000 - 3000 lux) condition. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: white

Prepared medium

Appearance: may have slight precipitates

Color: colorless

Incubation conditions: 25 ± 2°C / 1 - 2 weeks / under shaking incubator & light (2000 - 3000 lux)

ATCC	ATCC	Inoculum CFU	Growth
<i>Anabaena variabilis</i>	29413	heavy	good

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

• REFERENCES

1. S.W.Wilhelm, C.G.Trick Iron-limited growth of cyanobacteria. Rev. 39:1979-1984 (1994)
2. M.M. Allen, R.Y. Steiner, J. Gen. Microbiol. 51, 203 (1968)
3. C. Lehel, et al, J. Biol. Chem. 268, 1799 (1993)
4. ATCC Catalogue of Bacteria & Bacteriophages 18th edition, 1992.

• PACKAGE

Cat. No : MB-C0799 Cyanobacteria Broth	500 G
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